VALIDATA

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DATA VALIDATION SUMMARY
REPORT

COMPANY:	URS Corporation
SITE NAME:	SSFL - Chemical Soil Background Study
CONTRACTED LAB:	Frontier Analytical Laboratory
PROJECT NUMBER:	29403634
QA/QC LEVEL:	Level IV
EPA SOW/METHOD:	EPA SW-846
VALIDATION GUIDELINES:	*USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Data Review,* 2008, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review,* 2010
SAMPLE MATRICES:	Soil & Water
TYPES OF ANALYSES:	Dioxins / Furans
SDG NUMBER:	7053

OVERVIEW

SAMPLES:

Client Sample #	Lab Sample #	Matrix	Dioxin/ Furan
CZBS0102S005	7053-001	Soil	X
CZBS0102D005	7053-002	Soil	X
CZBS0099S005	7053-003	Soil	X
CZBS0099S005MS	7053-003MS	Soil	X
CZBS0099S005MSD	7053-003MSD	Soil	X
CZBS0100S005	7053-004	Soil	X
CZBS0100D005	7053-005	Soil	X
CZBS0103S005	7053-006	Soil	X
CZBS0101S005	7053-007	Soil	X
CZBS0104S005	7053-008	Soil	X
CZBS0105S005	7053-009	Soil	X
CZBS0098S005	7053-010	Soil	X
CZBS0095S005	7053-011	Soil	X

Client Sample #	Lab Sample #	Matrix	Dioxin/ Furan
CZBS0094S005	7053-012	Soil	X
CZBS0092S005	7053-013	Soil	X
CZBS0091S005	7053-014	Soil	X
CZBS0093S005	7053-015	Soil	X
EBQW00021	7053-016	Water	X
FBQW00006	7053-017	Water	X

SUFFIX CODES: D= FIELD DUPLICATE, DL = DILUTION, MD = MATRIX DUPLICATE, MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWERS: Amy L. Hogan, Kevin C. Harmon, Diana Levy

RELEASE SIGNATURE: Digitally signed by: Diana Levy
Date: 2012.02.20

Data Qualifier Definitions

J	-	The associated numerical value is an estimated quantity.
J+	-	The associated numerical value is an estimated quantity, potentially biased high.
J-	-	The associated numerical value is an estimated quantity, potentially biased low.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

Protocol Qualifier Classification: The data point was outside the analytical method, data validation guidelines or project specific limits.

Advisory Qualifier Classification: The data point was qualified based on professional judgement of the validator.

Note: All qualifiers applied to the data in all analytical fractions are considered Protocol Qualifier Classification unless specifically noted as Advisory.

DATA QUALIFICATION SUMMARY

Frontier Analytical Laboratory – 7053- Organics & Inorganics

SAMPLES: CZBS0102S005, CZBS0102D005, CZBS0099S005, CZBS0100S005, CZBS0100D005, CZBS0103S005, CZBS0101S005, CZBS0104S005, CZBS0105S005, CZBS0098S005, CZBS0095S005, CZBS0094S005, CZBS0092S005, CZBS0091S005, CZBS0093S005, EBQW00021, FBQW00006

DIOXINS/FURANS

SUMMARY

I.) General:

All laboratory data were acceptable without qualification.

MAJOR ISSUES

There were no major problems associated with this SDG.

MINOR ISSUES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blanks:

There were no detections in the method blanks associated with this fraction of the SDG. No action was required.

Equipment Rinsate Blank:

There were no detections in the equipment rinsate blanks associated with this SDG. No action was required.

Field Blank:

There were no field blank associated with this SDG. No action was required.

V.) Laboratory Control Samples (LCS):

Two LCS / LCSD sets were analyzed by the laboratory for this SDG. All LCS criteria were met. No action was required.

Reporting Limit LCS (RL LCS):

The RL LCS associated with this fraction of the SDG was submitted in another SDG. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample CZBS0099S005. All MS / MSD criteria were met. No action was required.

VII.) Cleanup Recovery Standard:

All Cleanup Recovery Standard criteria were met. No action was required.

VIII.) Field Duplicates:

Two sets of field duplicate samples (CZBS0102S005 / CZBS0102D005 and CZBS0100S005 / CZBS0100D005) were identified for this fraction of the SDG. The calculable Relative Percent Differences (RPDs) for the first set were:

2378-TCDD	7.4%
12378-PeCDD	5.3%
123478-HxCDD	17%
123678-HxCDD	8.9%
123789-HxCDD	9.7%
1234678-HpCDD	30%
OCDD	36%
2378-TCDF	17%
12378-PeCDF	7.5%

23478-PeCDF	5.2%
123478-HxCDF	11.6%
123678-HxCDF	17.2%
234678-HxCDF	11.6%
123789-HxCDF	23.3%
1234678-HpCDF	24.9%
1234789-HpCDF	37.8%
OCDF	42.5%
Total TCDD	26.9%
Total PeCDD	2.6%
Total HxCDD	8.2%
Total HpCDD	33.3%
Total TCDF	17.2%
Total PeCDF	1.6%
Total HxCDF	3.9%
Total HpCDF	29.7%

The calculable Relative Percent Differences (RPDs) for the second set were:

123678-HxCDD	10.2%
123789-HxCDD	7.0%
1234678-HpCDD	10.2%
OCDD	3.8%
2378-TCDF	19%
23478-PeCDF	22.4%
123678-HxCDF	2.8%
234678-HxCDF	8.5%
1234678-HpCDF	1.4%
OCDF	7.4%
Total TCDD	52.0%
Total PeCDD	10.2%
Total HxCDD	3.0%
Total HpCDD	0.7%
Total TCDF	6.2%
Total PeCDF	7.2%
Total HxCDF	2.2%
Total HpCDF	10.3%

All RPDs were within the advisory 60% QC limit for soil samples. No action was required.

IX.) Labeled Standards Performance:

All Labeled Standards Performance criteria were met. No action was required.

X.) Compound Identification:

All Compound Identification criteria were met. No action was required.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No action was required.